

### ABSTRACT

An electrochemical device having battery characteristics and an electrode used therefor. The electrochemical device has a first pole, a second pole, and an electrolyte, said first pole containing an active material having at least one element selected from the group consisting of 1B Group, 2B Group, 6A Group, 7A Group, and 8 Group of the short-form periodic table, and said electrolyte containing an element belonging to 2A Group and/or 3B Group of the periodic table. Interactions between the electrolyte and the active material cause the occlusion and release of said ions.